# simatherm

### **Technical Data Sheet**

## Induction Heater IH 045



# Compact induction heater for bearings weighing up to 45 kg

The compact simatherm induction heater offers a working space of  $114 \times 160$  mm for heating small to medium-sized rolling bearings and other ring-shaped metal parts. With the automatic time and temperature control, rolling bearings can be heated up to the  $110^{\circ}\text{C}$  specified by manufacturers, and other ring-shaped metal parts up to  $180^{\circ}\text{C}$ .

- Supplied with three yokes as standard
- Very compact design including the yokes only 17 kg in weight
- Extendable bearing support for safe support of workpieces with large diameters
- Remote control via mobile devices via Bluetooth possible (only possible with app "World of Maintenance"!)
- 2 probe technology (Delta-T) to avoid mechanical stresses in the workpiece

#### **Description IH 045**



- 1 Clear user interface with LED display
- 2 Extendable bearing support
- 3 Induction coil outside the housing, shortens heating times and reduces energy intake
- 4 Support yoke (standard with 3 standard yokes)
- Magnetic temperature probes; monitoring of bearing temperature on inner and outer ring and protection against bearing overheating
- 6 Blue LED indicates Bluethooth connection
- 7 Main switch



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| Designation                                    | Heater for medium workpieces  |
|--|---|
|  | 100 V / 50 – 60 Hz / 1,5 kVA  |
| Voltage V / Hz / power                         | 110 – 120 V / 50 – 60 Hz / 1,7 kVA  |
| NA/  | 220 – 240 V / 50 – 60 Hz / 2,1 kVA  |
| Workpiece - Maximum weight                     | 45 kg   |
| - Bore diameter                                | 20 – 310 mm   |
| Temperature control                            |   |
| - Range  | 20 – 180°C (68 – 356°F)   |
| - Magnetic probe                               | Type K  |
| - Accuracy (electronic)                        | ± 3°C   |
| Time control                                   |   |
| - Range  | 0 – 60 minutes  |
| - Accuracy                                     | ± 0,01 seconds  |
| Maximum temperature (approx.)                  | 180°C (356°F)   |
| Thermometer mode                               | yes   |
| Bearing temperature mode                       | yes   |
| Power reduction                                | 8 levels / 10-20-30-40-50-60-80-100%  |
| Automatic demagnetization / residual magnetism | yes / < 2A/cm   |
| Suitable for heating sealed bearings           | yes   |
| Suitable for heating pre-greased bearings      | yes   |
| Error guide codes                              | yes   |
| Thermal overload protection                    | yes   |
| Maximum magnetic flux                          | 1.5 T   |
| Control panel                                  | keyboard wtih LED-display   |
| Connectivity                                   | supports Bluetooth® Low Energy 5.0 standard                                 |
| Size of the operating area (W x H)             | 114 x 160 mm  |
| Coil diameter                                  | 89 mm   |
| Measurements (L x W x H)                       | 320 x 267 x 293 mm  |
| Overall weight including yokes                 | 17 kg   |
| Number of standard yokes                       | 3   |
|  | $42.5 \times 42.5 \times 219$ mm for bearings with a bore diameter >= 60 mm |
| Standard yokes                                 | 28 x 28 x 219 mm for bearings with a bore diameter >= 40 mm                 |
|  | 14 x 14 x 219 mm for bearings with a bore diameter >= 20 mm                 |
| Core cross section                             | 42,5 x 42,5 mm  |
| Yoke storage                                   | integrated  |
| Housing material                               | plastic   |



#### Features and dimensions IH 045

- Can heat a 28 kg bearing from 20°C to 110°C in less than 20 minutes, saving time and energy
- 8-stage power intake in combination with smaller yokes, allows smaller bearings to be heated safely and quickly with less energy
- $\bullet$  Temperature pre-selection to 110°C to protect the bearings from overheating
- Automatic demagnetization
- 3 years manufacturer's warranty